

PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, DECEMBER 25, 1875.

ORIGINAL LECTURES.

CLINICAL LECTURE ON THE TREATMENT OF OPIUM- POISONING.

Delivered at the University Hospital

BY PROF. H. C. WOOD.

Reported by WM. MCD. MASTIN, M.D., Resident Physician.

GENTLEMEN,—I shall occupy the hour in studying with you briefly the treatment of opium-poisoning.

Opium-poisoning is usually divided into three stages: first, that of cerebral excitement; second, that of stupor, with a slow full and strong pulse, very slow deep respirations, warm dry skin, and contracted pupils; third, that of coma and exhaustion, with profound stupor, rapid feeble pulse, distant and often stertorous respirations, moist and cool skin, and contracted or dilated pupils. The first of these stages exists rather in the fancy of systematists than in nature; and in my experience in very young children the second stage is also largely a myth, the victim passing almost at once into a condition bordering upon collapse.

Most usually in adults the doctor is called to the case whilst in the second stage. The first thing to be done is of course to evacuate the stomach, either by an emetic or by the stomach-pump. In deciding which of these means to use, be governed by the form in which the drug is taken. If a liquid preparation has been ingested, the pump is preferable, on account of the slowness and uncertainty of the emetic; but if solid opium has been swallowed, the pump cannot bring it up, and an emetic is the remedy. A stomach-pump may be readily extemporized by passing one end of a piece of gum tubing three or four feet in length into the patient's stomach, pouring water into the tube until it and the stomach are full, and then dropping the fore end so as to make a siphon. In this way the stomach should be washed out by alternate filling and emptying.

If an emetic is used, it must be a quick, active one, which will produce no depression. The object is simply to evacuate the stomach, and not to increase the exhaustion of the already paralyzed nerve-

centres; tartar emetic and the other preparations of antimony are to be carefully avoided, and a mechanical emetic employed. One of the best, and one found in every house, is mustard flour. A heaped tablespoonful may be given in a tumbler of water at once, and, if it fail, should be aided by thirty grains of the sulphate of zinc, or ten grains of the sulphate of copper, as soon as they can be obtained from the drug-store. Ipecacuanha may be administered almost *ad libitum*, but it is rarely allowable to exceed the quantities of the mechanical emetics just given; whether the emetics succeed or not, the indications are to keep up the respiration and prevent exhaustion. If the dose taken be sufficient, the patient is destroyed either by the effect of the drug upon the respiratory centre or by the exhaustion which is secondarily produced. The respiration gradually gets slower and slower, until it may fall to three or four a minute. This deficiency of movement prevents the admission of the requisite amount of oxygen and also the escape of the carbonic acid. The blood becomes more and more poisoned with the latter gas, until at last the narcosis is due not only to the opium, but even more largely to the carbonic acid. The failure of respiration precedes, and also in great measure produces, the exhaustion: therefore usually the first indication is to maintain breathing.

Happily, we have numerous means at our disposal to effect this. Of these, the simplest is urging the patient to breathe by vehement commands shouted in the ear; and it is really astonishing how great an effect this may have. I have seen deep inspirations follow such orders in one apparently unconscious. For the purpose of aiding this by arousing the patient, shaking and walking are employed, and are often of great benefit. In severe cases they are not sufficient, and flagellation is often used. But here let me impress upon your minds the uselessness, and often harm, of carrying these measures too far. I have seen patients after recovery from narcotic poisoning black and blue from head to foot, and others whose lives were imperilled by the exhaustion resulting from marching for many hours.

Always employ the least severe measures that will answer, and never use whipping to any extent; short, quick slaps with an

open wet towel afford the best method of employing the remedy. But the use of the *dry electric brush* renders all whipping unnecessary. If the current be very strong, it causes a great deal of pain, and wakes the patient most effectually, and at the same time, if the brush be passed quickly over the body, no trace of action is left. Moreover, the moral effect of the measure upon the bystanders is far better than that of the more barbarous remedy.

Another and admirable method for exciting respiration is the cold douche. It acts doubly, first by arousing the patient by the shock to the nervous system, and secondly by stimulating directly the respiration. All of you are familiar with the sudden gasp of the cold plunge-bath. The patient should be stripped to the waist, and an alternate douche of ice-cold and very hot water dashed over the head, neck, and chest. I have employed the douche in this way in various forms of failure of respiration, with the happiest effects. In a recent article, Dr. Jürgensen affirms that "if a stream of water not more than a third of an inch in thickness is directed upon the back part of the head, over the region of the medulla oblongata, a spot will soon be found, the irrigation of which produces the most violent respiratory efforts." I have had no opportunity of trying this, but the high reputation of Dr. Jürgensen lends great weight to his words.

A great deal has been written concerning the antagonism of atropia and opium. I do not believe that there are any two medicines absolutely antagonistic; but there are many drugs which are in some of their actions opposed to one another. But atropia and opium are not antagonistic even in the sense that aconite and digitalis are; and yet atropia is invaluable in opium-poisoning. Clinical experience has, to my mind, fully established this, and the very careful experiments of the late Dr. J. Hughes Bennett have demonstrated it in regard to the lower animals.

Atropia should be employed not as an antidote, but as a remedy when the respiration is failing, precisely as alcohol is used when the circulation is failing.

Atropia is a powerful stimulant to the respiratory centres. If it be administered in small doses when the breathing is very slow, the respirations are increased very remarkably in frequency, and, the carbonic acid being thrown off from the blood, the patient

arouses, restored to consciousness not by the direct but by the indirect action of the remedy upon the nerve-centres. In what way and quantity should the mydriatic be given? Always use the *alkaloid* hypodermically, and in very small repeated doses, if possible. Recollect, belladonna-poisoning may be and often has been produced, and I believe in some reported cases has caused death. It is commonly stated that the pupils should be the guide, the quantity given being regulated by the amount of the dilatation produced. But as opium contracts the pupils by its influence on the brain-centres, whilst atropia dilates them by acting locally on the peripheral nerves in the iris, it is not proper to rely solely or chiefly upon the state of the pupils. In small doses atropia stimulates the nerve-centres, but in larger doses it paralyzes the trunks of the nerves. Hence, in opium-narcosis, if doses of atropia large enough to influence the nerve-trunks were given, a nerve-paralysis would be added to that of the centres caused by the opium; so that, instead of arousing the centres by its stimulant effect, the remedy would increase the embarrassment by paralyzing the nerve-trunks.

Just think, gentlemen, why you give the atropia,—to stimulate the respiration: therefore let its influence on that function direct you as to its administration. For instance, suppose we had a patient who was in the last stage of opium-poisoning, with slow respirations,—down to four or five in the minute,—and had exhibited one-thirtieth of a grain of atropia hypodermically. If in fifteen minutes or half an hour the respirations had risen to ten, we would know that the desired end was being accomplished, and as long as the breathing continued to increase, I would give no more of the remedy; but if the respirations commenced to grow less frequent, it would be proper to exhibit the one-sixtieth of a grain, and repeat it every half-hour until the breathing showed the effect; or the dilatation of the pupil warned us that we were approaching the danger-point. The golden rule is, *Give the least possible quantity that will produce the required effect.*

For a long time strong coffee has been the classic remedy in opium-poisoning. I have seen it at various times given *ad libitum*, but must confess that I never saw in a serious case any appreciable good results from its use. It is probably different with

caffea, which, when it is procurable, should always be used. I have never seen it given, and have never yet seen a fatal case of opium-poisoning. If the physician be called sufficiently early, death ought to occur only under exceptional circumstances. Caffea and atropia may be used conjointly; the first alkaloid exerts a most powerful stimulant effect upon the cerebrum, and it seems to be more capable than is atropia of recalling to life the mental functions, but to have less direct power upon the respiratory centre. They may be therefore considered to be complementary to each other in opium-poisoning. Moreover, Dr. Bennett found that caffea rescues poisoned animals within narrow limits in regard to the dose of morphia employed.

In the third stage of opium-poisoning alcohol must be used with freedom to maintain the circulation, atropia being employed for its cardiac as well as its respiratory stimulant action, and dry external heat freely used to prevent the depressing influence of lessened bodily temperature. In those cases of severe opium-poisoning which I have seen in very young children, the symptoms of impending collapse have developed very early, and the free use of alcohol has been necessary from the start.

In some rare cases of opium-poisoning where the subject has been seen early and has been very robust, excessive symptoms of venous engorgement of the lungs and brain have seemed to demand venesection, and blood-letting has actually been of great service. Such cases are, however, exceedingly infrequent, and in the vast majority of instances venesection would be homicidal.

If, in spite of all that can be done, the respirations continue to fail in a case of opium-poisoning, it becomes the attending physician's duty to maintain it mechanically. The practice of artificial respiration should not be put off too long. The moment the treatment already prescribed fails to bring the respirations above six a minute, and voluntary efforts cannot be brought to the aid of the involuntary breathing, the patient should be laid upon a bed or upon the floor, and artificial respiration maintained. I shall not occupy time to-day with describing these methods. On the whole, I think Sylvester's plan is the best. It should, if necessary, be practised steadily until long after every cardiac sound has been lost. Remember, cases have been restored in which almost every

sign of life had been wanting for some minutes or even hours.

There are two remedies which have been employed with asserted success in opium-poisoning, which I have not yet mentioned. The first of these is oxygen gas. Of this all I shall say is, if you can get it by all means use it. I have never been able to get it when wanted. The second is the maintenance of respiration by the use of galvanism. I have tried this in several cases, and believe it to be decidedly inferior to direct artificial respiration. It has seemed to me less efficient, is more exhausting to the patient, and, if maintained for any length of time, is very liable to add seriously to the danger by lessening, for the time being, the functional activity of the phrenic nerve. Moreover, Beard and Rockwell chronicle a case of opium-poisoning in which recovery was apparently taking place, but in which instantaneous death resulted from an attempt to hurry matters by faradization of the phrenic nerve.

In order, gentlemen, to illustrate the points which have been brought to your notice to-day, let me narrate to you a case which I treated not long since. I was riding along the street one day when a stranger hailed me with the question, "Are you a doctor?" Not to enter into details, after a brief conversation I went with him to his store, found a young girl suffering from menstrual cramps with hysterical convulsions, and ordered the usual remedies. Among them was a prescription containing one-half grain of sulphate of morphia, to be given in six doses if necessary. Leaving the patient, I thought no more of the case until hastily summoned some hours after.

On arriving at the house, I found that one-sixth of the prescription had been given every hour until five doses were taken, although the girl had been gradually sinking into a stupor. As the last dose was being administered, a gentleman who entered the room exclaimed, "The girl is dying! she has been poisoned. Give her no more medicine." He then dashed over to the apothecary-shop and spoke to the proprietor. The latter said something to his clerk, seized a bottle of sulphate of zinc, jumped over the counter, and, without saying a word, ran across the street, up the stairs, and in an instant was dragging the apparently lifeless girl up and down the room, shaking and beating her.

Under this treatment respiration re-

commenced, and our apothecary found leisure to tell the bystanders that full eight grains and a half of morphia had been put up for the half-grain ordered. The girl had therefore taken over seven grains of the alkaloid in four hours.

The emetic given had no effect. The family physician of the girl's employer, a homœopath, was sent for. Under his directions the girl was marched up and down the room, was shaken, shouted at, beaten, drenched with coffee, and persecuted in all manner of ways. Finally, he said she must die; and then they summoned me.

On my arrival ethics said, Don't consult with a homœopath; but before me lay the senseless body of the girl, brought into this condition by my innocent instrumentality. It would have been worse than useless to raise a controversy with those who had called in Dr. —. To them I was a stranger, he a medical demigod. Making a virtue of necessity, I consulted with the dispenser of dilute nothings, but had a hard time in overawing him and his followers. He objected to atropia. I insisted, and finally one-fiftieth of a grain was administered. The pupils did not dilate perceptibly, but the respiration was much improved; and as the lividity faded from the cheeks, the emetic began to act, and free vomiting occurred. You can understand why. The double narcosis from the morphia-poisoning and from the accumulation of carbonic acid in the blood was too great to allow the nervous system to perceive the sulphate of zinc in the stomach; but so soon as the carbonic acid was removed, the morphia alone was not able to prevent the action of the emetic.

After half an hour had passed, affairs grew worse again. The girl had been severely handled by her attendants for four hours, and, seemingly utterly exhausted, had been laid upon the bed. I was in the next room, and heard the exclamation, "She is dead!" Hurrying to the bedside, I found that sure enough respiration had ceased. Pushing aside those who crowded about her, I lifted her from the bed, and carried her bodily into the fresh air, shouted into her ear the command to breathe, and was rewarded by seeing voluntary efforts imperfectly replace the ordinary involuntary breathing. Again one-fiftieth grain of atropia was given, and again the respirations were improved. A battery having now been obtained, she was

laid upon the bed, and the strongest currents applied with the wire brush to different parts of the body; not to affect directly the respiration, but to give pain, and thus arouse the patient. Their action was most happy. The girl was so exhausted that she could walk no more; her limbs were covered with bruises from her previous flagellations. The battery did the work, but produced no exhaustion, and left no trace upon the tissues. Gradually she became more and more intolerant of it, and finally, after some hours, I left her out of danger. The atropia and battery had, apparently, saved her life.

ORIGINAL COMMUNICATIONS.

OXALATE OF CERIUM.

BY CHARLES K. MILLS, M.D.,
Philadelphia.

*Read before the Philadelphia County Medical Society,
October 27, 1875.*

I. THE CERIUM METALS AND THEIR COMPOUNDS.

CERIUM is an earth-metal, chiefly obtained from the Swedish mineral cerite, but found also in allanite, orthite, gadolinite, monazite, cryptolite, and a few other bodies. Its symbol is Ce, and its atomic weight, according to the new system, is 92. It was discovered in 1803, by Hisinger and Berzelius, and about the same time by Klaproth, and was named after the planet Ceres. It is generally associated in nature with the metals lanthanum and didymium. Cerite, the first and principal source of cerium, is a hydrated silicate of cerium, containing also lanthanum and didymium, together with very small quantities of about half a dozen other elements. Lanthanum was not discovered in this mineral until 1839, by Mosander, and was given its name from the Greek *lanthanein*, to "lie hidden," because it had so long escaped notice. Its symbol is La, and its atomic weight 92.8. Didymium—from the Greek *didymoi*, "twins," because of its constant association with lanthanum—was discovered in 1841, by Mosander. Its symbol is Di, and its atomic weight 96. Cerium is described by Beringer as a gray powder, resembling pulverized spongy platinum, which acquires metallic lustre under the burnishing-steel; by Mosander, as a dark, reddish-brown powder, which under the

steel acquires a metallic lustre and grayish color. Lanthanum and didymium are gray powders. Like potassium and sodium, these metals decompose water at ordinary temperatures, and dissolve rapidly in dilute acids, with evolution of hydrogen.

Cerium forms three series of compounds: the cerous or proto-compounds; the ceric or sesqui-compounds; and the ceroso-ceric compounds, which probably result from the combination of the other two. Some authors state that no positive proof exists of the formation of ceric or sesqui-compounds. The cerium oxides correspond to the well-known oxides of iron; namely, the ferrous, the ferric, and the ferroso-ferric or magnetic oxide of iron.

The compounds of cerium, lanthanum, and didymium, with about a dozen other elements, have been studied more or less fully by chemists and mineralogists; but as physicians we are most interested in the oxalate of cerium, which is the only salt of the metal that has been much used in medicine. It is a salt of the protoxide, and hence, strictly speaking, should be called cerous oxalate; but I will generally employ the designation "oxalate of cerium," as this is familiar to the profession and recognized by the Pharmacopœia. The nitrate of cerium has been tested therapeutically to a limited extent, and with favorable results; and it is possible that other salts of cerium may possess equal and perhaps superior virtues to the oxalate. The chief reason for resorting to the latter is that it is most easily obtained from the cerium minerals. Oxalic acid precipitates the oxide of cerium completely, even from moderately-dilute solutions.

The following are the general steps of one process for obtaining oxalate of cerium. Cerite is finely pounded, and decomposed by boiling for some hours with strong hydrochloric acid to separate the silica, the cerium and other metals dissolving as chlorides. The solution is filtered and treated with a slight excess of ammonia, which precipitates everything but the lime. The precipitate is redissolved in hydrochloric acid, and excess of oxalic acid added. A faintly amethyst-colored precipitate is thus obtained, which is the oxalate of cerium of commerce.

A curious mistake in regard to oxalate of cerium occurs in Professor Stillé's valuable work on *Materia Medica and Thera-*

peutics. He says, "This salt is procured by the direct action of oxalic acid upon the metal cerium." We might as well speak of obtaining magnesia for medical purposes by the direct action of oxygen upon the metal magnesium. Cerium is extracted from the minerals containing it by a tedious process, during the course of which, and some time before its completion, the oxalate is precipitated from solution by oxalic acid or oxalate of ammonium.

Among the names prominent in the history of the cerium metals are those of Klaproth, Hisinger, Berzelius, Vauquelin, Laugier, Thomson, Gahn, Mosander, Beringer, Watts, Bunsen, Marignac, Holzmänn, Otto, and Hermann. The chemistry and chemical bibliography of these metals may be found in such works as Gmelin's *Hand-Book of Chemistry*, Graham's *Chemistry*, Watts's *Chemical Dictionary*, Fresenius's *Manual of Qualitative Chemical Analysis*, and Crookes's *Select Methods of Chemical Analysis*. F. F. Mayer, in the *American Journal of Pharmacy* for January, 1860, describes a new process for manufacturing the oxalate of cerium.

II. COMMERCIAL AND CHEMICALLY PURE OXALATES OF CERIUM.

Upon the table I have placed three specimens of oxalate of cerium. Two of these are chemically-pure articles. The other is a sample of the commercial salt. On examining them, you will discover some differences in their physical properties. The oxalate of cerium is generally spoken of in the books as a white powder. The pure salt is white; but the commercial, as you can see, has a pink or amethystine tinge. One of the chemically-pure articles is of finer texture than the other. Through the kindness of Mr. Coleman Sellers, I some time since received from President Henry Morton, of the Stevens Institute of Technology, several ounces of different specimens of the oxalate of cerium; and I will give here a letter from him, which contains some interesting information in regard to the cerium metals and their salts, and which sets forth his objects in placing these preparations in my hands.

"STEVENS INSTITUTE OF TECHNOLOGY,
HOBOKEN, NEW JERSEY.

"DR. CHAS. K. MILLS:

"MY DEAR SIR:—In reply to your request that I would give you some written

statement concerning the circumstances that originated the idea of experimenting upon the relative therapeutic values of the commercial and pure oxalates of cerium, I would say as follows:

"Having established certain results in reference to the double salts of uranium by a method of spectrum analysis, it occurred to me that the results so obtained, if general, could probably be traced in the double salts of didymium by a similar method of observation, as these present strong absorption-spectra.

"To accomplish any such work, however, it was first necessary to obtain a large supply of didymium salts in a state of purity.

"I first tried what could be done in this direction from the salts in the market. Here, however, I found, strange to say, that a material sold by some of our best chemical dealers as oxide of didymium, and supplied to them as such by foreign houses, did not contain a particle of that element, and that such salts of the same as were to be had from like sources were little else than mixtures of salts of cerium, lanthanum, and didymium, in about the proportion in which these bases occur in the native mineral 'cerite,' which is the chief source of these bodies.

"It was therefore evident that resource must be had to the mineral itself, and the manufacture of the salts I required undertaken. Having mentioned the matter to Dr. Chas. F. Chandler, Dean of the School of Mines, Columbia College, New York, he ordered for me and placed at my disposal some fifty pounds of very pure cerite from Denmark. Dr. J. Laurance Smith, of Louisville, Kentucky, also gave me a quantity of material in various states of preparation, representing in the aggregate between ten and twenty pounds of cerite. The adequate treatment of so large a mass of substance being quite beyond the capacities of a private experimental or analytical laboratory, I made arrangements with Messrs. Moore & Squier, then inaugurating the manufacture of chemically-pure acids and salts, in Jersey City, to undertake the extraction and separation of the three bases.

"My primary object was, of course, the procuring of a pure didymium salt; the salts of cerium and lanthanum, having no absorption-spectra, presenting no points of interest in this connection. To obtain all

the didymium possible from my material, however, involved necessarily the separation of the other two bases in a state of great purity.

"In the course of some preliminary experiments, I had observed that the commercial oxalate of cerium used to a certain extent in medicine was, in fact, only a mixed oxalate of the three cerite bases, and it therefore struck me that my large stock of pure cerium and didymium salts might be well employed in experimentally answering the question,—To which of the constituents does the commercial oxalate of cerium owe such therapeutic virtues as it may possess?

"I therefore procured a large quantity of the commercial oxalate of cerium (in other words, of the oxalates mixed in about the proportion in which they are found in the mineral cerite), and had it put up in bottles of a convenient size and clearly labelled. I also requested Messrs. Moore & Squier, as soon as they had obtained some dozen pounds of cerium salt (the first separated in the treatment of the mineral) in a state of great purity, to put these up in a similar manner.

"Mr. Moore drew my attention to the fact that when thrown down from a solution kept carefully neutral by the addition of carbonate of soda from time to time, the oxalate appeared as an impalpable powder, much finer than the commercial mixed salt, while on the contrary it appeared as a gritty powder when precipitated from an acid solution.

"I therefore requested him to prepare a quantity of the pure salt also in this latter condition, in order that the influence of its state of aggregation might also be put to test. Having, through the kindness of my friend Mr. Coleman Sellers, interested you in the matter, I sent you a supply of the three materials above mentioned; and as soon as the salts of lanthanum have been purified, I propose to supply you with them likewise, as well as with other salts of cerium, by which the question as to whether it is the base or the oxalic acid which is effective may be settled.

"The didymium is so rare, and so little in excess of the requirements of my spectroscopic work, that I can only promise to furnish you with that after my observations of it are concluded. As, however, these will, I hope, not be indefinitely prolonged, and as there is much yet on hand

to be accomplished in the experiments with the other salts, this will probably not occasion any actual delay in the total work.

"With a sincere appreciation of the kindness, and the interest in science, which have led you to enter upon this work, I remain,

"Very truly yours,

"HENRY MORTON."

Whenever the opportunity could be had, I have been testing the therapeutic virtues of the three preparations referred to by Professor Morton: namely, 1, the chemically-pure oxalate of cerium precipitated from neutral solution; 2, the chemically-pure precipitated from acid solution; and, 3, the commercial oxalate. In a certain class of cases, which will be treated of hereafter, all of these articles are efficient,—which fact, however gratifying, makes the determination of their relative value troublesome. Many difficulties also beset an undertaking of this kind; such as the impossibility of getting cases exactly alike, the differences in the surroundings of patients, the unreliability of their statements, and their frequent failures to report. The commercial oxalate was used in thirty-six, and each of the specimens of chemically-pure in twelve out of sixty cases in which I have the results of treatment recorded. In answer to Professor Morton's query as to which of the constituents of commercial oxalate of cerium its therapeutic virtue is due to, I can simply say that both the pure and the commercial oxalate are efficient remedies, and, hence, that the oxalates of lanthanum and didymium would probably also be efficient. Generally the commercial article succeeded as well as the pure, and, in a few cases, even better. It answered best when well triturated. Occasional unexpected failures with the commercial oxalate may be due to the presence of some irritating foreign matter, such as silica. In the course of some chemical experiments, to which attention will be called hereafter, Dr. Leffman and the writer, in one sample of the commercial salt, found an impurity which we concluded from its properties to be silica. If the mixed oxalate contains only cerium, lanthanum, and didymium, I believe it to be a very efficacious drug. I expect soon to have some pure oxalate of lanthanum for use in practice, and I will then be able to determine beyond doubt whether this lantha-

num salt has any therapeutic value. Of the two chemically-pure specimens of oxalate of cerium, the impalpable powder, obtained by precipitation from neutral solution, was rather more satisfactory than the other; but the distinctions in merit between the two were not very well marked.

Lanthanum salts could probably be manufactured cheaply enough to allow of their introduction into medicine. Lanthanum exists in cerite in considerable amount; and in lanthanite, lanthanocerite, and monazite—minerals described by Dana—it is also present in large proportion. Didymium is rarer, and the manufacture of its salts would be very costly; although it should be borne in mind in this connection that, during the separation of the didymium, pure cerium and lanthanum salts are obtained as by-products.

(To be continued.)

PROBABLY A UNIQUE CASE OF OPERATION FOR STRANGULATED INGUINAL HERNIA, PERFORMED FORTY-FIVE HOURS AFTER BIRTH; FOLLOWED BY RECOVERY OF THE PATIENT AND A RADICAL CURE OF THE RUPTURE.

BY FRANK WOODBURY, M.D.,

Reporter for the Philadelphia County Medical Society.

THROUGH the kindness of Dr. Thomas H. Andrews, Demonstrator of Anatomy at the Jefferson Medical College, the opportunity of seeing the result of a most interesting operation was recently offered, and permission accorded to present a brief account of it to the readers of the *Medical Times*. The operation for the relief of strangulated inguinal hernia by the indirect descent was performed in this instance, perhaps, for the first time on record, upon a patient of such tender age, the infant being less than two days old at the time it was resorted to, after repeated attempts at reduction by taxis and treatment had failed. The case was then in such bad condition that an unfavorable prognosis had been given, and no hopes held out of success.

The subject was the twelfth child of a healthy American woman. The labor was not very difficult, and terminated on the 10th of August, 1874, at five in the afternoon. At birth the child was asphyxiated, and some difficulty was experienced in establishing respira-

tion, but after this it continued to cry and fret, giving the mother the impression that it was in pain; about midnight she noticed a prominence in the right groin, which seemed tender, and then about the size of a small walnut. The next evening Dr. Andrews (who had been prevented by absence from the city from attending the confinement) prescribed an anodyne, his attention not being directed to the swelling. The following morning he discovered a tumor, which had now attained the size of an orange, and which he recognized as a hernia. Taxis was tried ineffectually, and repeated in a couple of hours, after a warm bath and small doses of opium, but with similar unsuccessful result; by this time, however, the swelling was as large as the child's head, and quite tender and discolored. A final attempt at reduction was made at 2 P.M., but in spite of careful manipulation it again failed.

Ether was now administered, and, just forty-five hours after birth, the operation was performed. Upon opening the sac, an indirect inguinal hernia was discovered, which had become strangulated at the internal abdominal ring. The band of tissue causing the constriction was nicked with a probe-pointed bistoury, the opening enlarged with the forefinger, and the gut, which was purple from the long-continued strangulation, carefully returned to the abdominal cavity with the aid of the forefinger and the ivory handle of an exploring-needle. The tumor contained the greater part of the small intestine from near the duodenum to the lower end of the ileum, but no omentum was found in the sac. The opposite walls of the canal were now brought together by one silk suture, the ends of which were led out of the external wound, which in turn was closed by several stitches, and dressed with oxide of zinc ointment, covered with picked lint. The patient made a rapid recovery, without a single bad symptom, a result as gratifying to the surgeon and parents as it was unexpected. A year has elapsed since the operation, which may now be considered as a final success. He is a strong, healthy child, and large for his age; until lately he has constantly worn a truss, but the hernia is now radically cured, and the support no longer needed.

REMARKS.—Glancing over the literature of the subject that is immediately accessible, I find that although congenital scrotal hernia is, according to Gross,* of frequent occurrence, there are, relatively, remarkably few cases of strangulation requiring operative interference. Holmes† remarks, "It is extraordinary how rarely hernia in children becomes strangulated. At the Hospital for Sick Children, during the

thirteen years of its institution, I cannot learn that an operation has been required; and very few cases of hernia have been admitted in a condition of strangulation;" and again, speaking in connection with another hospital, he says,‡ "It occasionally happens, although very rarely, that a congenital inguinal hernia becomes strangulated in infancy so obstinately as to require operation." According to Broca,§ "Les enfants présentent rarement un étranglement véritable. Toutefois, le collet non oblitéré de la tunique vaginale peut recevoir une anse d'intestin et l'étrangler. M. Goyrand a observé cet accident sur un enfant de quatre mois. Il paraît même que M. Heyfelder l'a vu sur un enfant de huit jours." In this opinion Gross|| concurs: "It is not often that a congenital scrotal hernia becomes irreducible, and it is still more rare to see it strangulated." Bryant¶ found that out of ninety-eight cases of inguinal hernia, that had existed for years previous to this accident, seven had been congenital in their origin.

This considered, it is, perhaps, not surprising that so few cases requiring surgical aid can be found reported. Erichsen** states that "Operations for strangulated inguinal hernia are required during a greater range of cases than those for any other kind of protrusion. I have operated successfully for congenital hernia in infants less than six weeks old, and for an ordinary oblique inguinal hernia, in one four months of age." Dr. Cheever†† reports a case of recovery in his private practice after operation for strangulated hernia in an infant of eleven weeks. Holmes was less fortunate, for out of two hundred cases, occurring at St. George's Hospital, and analyzed in the paper before referred to, "four operations were performed in infancy, all under the age of seven months, . . . three of whom died." Returning to Gross,‡‡ the statement is found that "Age is no bar to the success of an operation for strangulated hernia. It has often been performed upon very old persons, and, on the other hand, cases have been reported in which it was

‡ Vide article by Holmes in St. George's Hospital Reports for 1867.

§ Broca, De l'Etranglement dans les Hernies abdominales, Second Edition, Paris, 1857.

|| Loc. cit.

¶ Bryant, Guy's Hospital Reports, vol. ii., N. S.

** Erichsen's Science and Art of Surgery, Am. Edition. Edited by John Ashhurst, Philadelphia, 1869.

†† Medical and Surgical Reports of the Boston City Hospital for 1870.

‡‡ Gross, op. cit., p. 600.

* Gross's System of Surgery, vol. ii. p. 610, Fifth Edition, Philadelphia, 1872.

† Holmes's Surgical Treatment of Children's Diseases, p. 567. London, 1868.

performed upon very young children. Thus, Curling has recorded an instance of twenty-one months, Rayner of seven weeks, and Fergusson of seventeen days. . . . In the cases observed by Curling and Rayner the success was most gratifying. Of forty-eight cases of strangulated hernia, nearly all of the inguinal variety, during the first and second years of infancy, collected in 1868, by Dr. E. W. Wimer, twenty-six were operated on with a loss of eight, eighteen were reduced by taxis with three deaths, and three were treated therapeutically with one fatal issue."

Without needlessly multiplying names, it may not prove uninteresting, in connection with this subject, to mention, in closing, the only case quoted by Dr. Paul F. Eve* of early operation, upon, however, a different form of hernia. "W. M. Fairbrother, in the London *Lancet* for 1850, reported a remarkable instance of congenital rupture in which about twenty-eight inches of the small intestine were strangulated at the umbilicus, and had evidently been so for many (?) days, as they were dark and discolored. The doctor operated at the next visit by making a median incision and restoring the bowel, but the patient died the same evening."

NOTES OF HOSPITAL PRACTICE.

SERVICE OF DR. R. J. LEVIE, AT THE PENNSYLVANIA HOSPITAL.

Reported by JOHN B. ROBERTS, M.D., Resident Surgeon.

COMPOUND FRACTURE OF ELBOW—EXCISION OF THE JOINT—TETANUS.

JAMES P., 35 years old, while digging at the foot of a stone wall, was buried beneath a large mass which became detached. On examination after admission, a dislocation at the left ankle, with the astragalus thrust backwards, as well as a compound fracture of the right elbow, was found. The end of the humerus and the shaft of the ulna protruded through a large ragged wound, while the olecranon process was broken off and drawn upwards by the triceps muscle. The head of the radius was not broken. Of course there was grave shock, with a frequent and weak pulse. Reaction was produced by the administration of whisky and quinine in large doses, supplemented by the use of beef-tea.

* Eve's Collection of Remarkable Cases in Surgery, Philadelphia, 1857.

Excision of the elbow-joint was clearly indicated, but, on account of the patient's depressed condition, was postponed. The reduction of the dislocation, however, was easily effected by making extension at the heel, and then flexing the foot, while pressure backwards was applied upon the lower part of the tibia and fibula.

Dislocations at the ankle are very uncommon, on account of the peculiar mechanism of the joint; they occur only as the result of great violence, and are usually accompanied by fracture. The diagnosis was easy, from the deformity in front, the great prominence given to the heel, and the tendo Achillis standing out in bold relief. This deformity was removed as soon as reduction was accomplished, and no fracture was detected by subsequent examination.

The man did not react fully for two or three days; then excision of the elbow-joint was performed. The wound, which was upon the posterior aspect of the arm, afforded sufficient room without being much enlarged, and after the tissues had been carefully dissected from the bones, the lower part of the humerus and the head of the radius and upper part of the ulna were sawn off. In this case the laceration was so great that the operation could not be done in a very artistic manner; but in excision of this joint it is necessary to dissect carefully to avoid injury to the ulnar nerve as it passes internal to the olecranon, and to save, if possible, the insertions of the biceps and brachialis anticus muscles, upon which the future usefulness of the arm depends. After the bones were sawn off, the sloughing tissues were cut away, the wound dressed with carbolic oil, and the man ordered quinine, iron, and whisky.

The following day the patient was doing well; but towards evening there was noticed decided stiffness of the jaws, with rigidity of the posterior cervical and the abdominal muscles. The physiognomy of tetanus was well marked.

The spasm of the muscles relaxed at times so that the mouth could be opened a little, and there were not the violent paroxysms that so commonly occur in cases of tetanus. Opisthotonos was scarcely present, and the only noticeable feature was the trismus.

The attempts at the curative treatment of traumatic tetanus are not often very satisfactory, and it is not easy to say what

influence is to be attributed to the remedies which have been used in cases when recovery takes place. Amputation of the injured part and excision of the nerves are generally of little service, and we must depend on anodynes and antispasmodics.

In this case chloral was chosen as the treatment, because in two previous cases perfect recovery took place after the employment of this remedy. It was administered in ten-grain doses every two hours, and the amount increased or diminished as required to prevent spasm and produce sleep. When pain became very great, morphia was given in addition, merely as a temporary anodyne.*

The patient continued without much change for three days, when his pulse became frequent, reaching 140 per minute, his respiration 36, temperature over 100°; and he soon died, from exhaustion, and not from spasm.

A post-mortem examination of the spinal cord was made, but nothing found except much congestion of the vessels of the pia mater.

TRANSLATIONS.

THE TREATMENT OF ANEURISMS BY MEANS OF THE INCOMPLETE PERMANENT METALLIC LIGATURE "À FIL PERDU."—Dr. Minkiewicz, of Tiflis, contributes an article under this title to *Virchow's Archiv* (Bd. lxxiii., 1875, S. 473).

After discussing the pathological conditions connected with certain forms of aneurism, he considers the use of this form of ligature, and concludes his remarks by the assertion that the permanent incomplete metallic ligature "à fil perdu" should be employed in those severe cases of aneurism of the principal arteries in which, as a result of a diseased condition of the artery in the neighborhood of the aneurism, the usual complete ligature cannot be used for fear of provoking hemorrhage. This form of ligature is also to be recommended where, on account of the same fear of hemorrhage, and on account of the anatomical relations of the parts, pressure cannot be employed. It is to be hoped, concludes Dr. M., that by the

use of this method the principal cause of an unfavorable result after the ligation of aneurisms, namely, the secondary hemorrhage, may be avoided. X.

THE TREATMENT OF VARICOCELE AND OF AN IRRITABLE CONDITION OF THE GENITAL APPARATUS BY COMPRESSION (*Centralblatt für Chirurgie*, No. 41, 1875).—Ravoth attaches much importance to this method of treatment, and relates cases of extensive varicocele complicated with frequent seminal emissions, sometimes with and sometimes without priapism, which were quickly ameliorated or cured. After the proper application of a truss, the varicoceles quickly decreased in size, the attendant neuralgia disappeared, the inclination to masturbate vanished, and, in several cases, commencing atrophy of the testicle was arrested. Among the results of this treatment the writer mentions acceleration of the circulation, increase of the tonicity of the veins and the cremaster, and the prevention of the venous congestion.

J. W. W.

ABSCESS OF THE LIVER FOLLOWING CEREBRAL INJURIES (*Centralblatt für Chirurgie*, No. 41, 1875).—According to Baerensprung, there are five etiological forces concerned in the production of abscess of the liver after injuries of the head: 1. The simultaneous action of an external force upon the hepatic region. 2. The action of a *contre-coup* through concussion of the whole body. 3. Emboli from a diseased condition of the extra-hepatic portal vessels. 4. Similar emboli from the pulmonary veins. 5. Metastatic localization of septicæmia. The widespread view, that these abscesses follow injuries of the head more frequently than other injuries is rejected by Baerensprung on statistical grounds, after a careful examination of the records of the Berlin Pathological Institute.

J. W. W.

SYPHILITIC INFECTION IN A WORKROOM (*Centralblatt für Chirurgie*, No. 41, 1875).—Poray-Koschitz reports an instance of the infection of a number of workmen with syphilis through the common employment of a ball of yarn, the threads of which were drawn through the mouth and bitten off. Of those working in the same room, and using this thread, but few escaped.

J. W. W.

LESION OF THE CEREBELLUM WITH DIABETES MELLITUS (F. Mosler: *Centralblatt für die Med. Wissenschaften*, No. 37,

* There is at present in the hospital a convalescent patient who was treated for traumatic tetanus with chloral entirely, except that two small doses of morphia were given to relieve pain.

1875; from *Deutsches Archiv für Klin. Med.*, xv.).—After the death of a diabetic patient, aged 39 years, who during his life gave no evidence of alteration of sensation or motion, and whose intellect had not been disturbed, a spot of softening of the size of a pigeon's egg was found in the nucleus dentatus of the left hemisphere of the cerebellum. Mosler supposes that in this way one of the routes by which vasomotor fibres run to the liver was interrupted, and that to the paralysis of these fibres thus produced the appearance of sugar in the urine was due.

W. A.

INFLUENCE OF ARTIFICIAL SUPPRESSION OF THE CUTANEOUS SECRETION.—Sokoloff (*Virchow's Archiv*, Bd. lxiv., Heft 2) experimented upon some forty-six dogs and rabbits. These animals were painted with oil and other substances, the results being as follows. The temperature usually fell. The urine showed gray and hyaline cylinders, kidney-epithelium, and young cells by which its specific gravity was increased; albumen also appeared. In one case dropsy occurred. Diarrhoea, loss of power in the heart, cramps, sopor, and, when the coating was extensive or complete, death in periods varying from a few hours to several days. Post-mortem examination showed congestion of the brain and membranes, as well as of most of the internal organs. x.

FALSE ABSCESES IN BONES AND NEURALGIC OSTEITIS (*La France Médicale*, October 20, 1875).—Professor Gosselin, at the close of a long and elaborate memoir on this subject, concludes that—1. In long bones condensed by an old osteitis there often exist cavities which do not contain pus, but which give rise to neuralgic pains; 2. The neuralgic pain of osteitis may exist without there being any accidental cavity, but always in bones hypertrophied by old inflammations; 3. Trephining in such cases may be useful, and is but very slightly dangerous.

J. W. W.

SALICYLIC ACID IN DIPHTHERIA.—Dr. Letzerich (*Virchow's Archiv*, Bd. lxiv., Heft 1, 1875) has made a number of experiments as regards the action of salicylic acid upon the organisms found in diphtherial deposits, the result showing that this acid possesses the power of killing the germs in question. He has also used salicylic acid in seven cases of the disease, five of which were mild, two severe. In the former cases a gargle according to the following formula was employed:

R Acid. salicylic., gr. xv;
Solve in sp. vin. rect., ℥ xxx;
Aq. destillat., ad ℥viii.

Under the frequent use of this gargle the diphtheritic membrane disappeared from the throat entirely in from two to four days. In the severer cases the treatment was both internal and external. Four and a half grains of the powder with an equal quantity of sugar were administered every two hours, and the throat was swabbed with a solution of the acid in alcohol and water (five parts acid, one part alcohol, and fifty parts water). In addition, the throat was occasionally touched with a damp camel's-hair pencil dipped in the powdered acid.

The result of this treatment was so favorable that Dr. Letzerich urges strongly its further trial.

x.

A NEW METHOD OF TREATMENT OF FEBRILE ARTICULAR RHEUMATISM (Kunz: *Centralblatt für Chirurgie*, No. 48, 1875; from *Deut. Zeitschrift für Prakt. Med.*, 1875, No. 40).—The treatment consisted in the hypodermic use of a solution of carbolic acid, and has been tried for a period of two and a half years. One or two joints were placed under treatment simultaneously by making one or two injections of a solution of carbolic acid, of a strength of two per cent., at the most painful points. No irritation usually resulted, and if there was any it was of but slight intensity. The acid seemed to act almost as an anæsthetic, for in a period varying in length from half an hour to several hours all pain ceased, the patient fell asleep, the swelling of the joint diminished, and but a slight amount of stiffness remained. After the lapse of a few days all symptoms of a rheumatic character vanished from the joint, and in but few of the cases did any relapse occur. The action of the carbolic acid was purely local, and influenced the fever only so far as it was due to the local inflammation. Quinine was also used in gramme doses; and Kunz thinks that by combining these two modes of treatment it is possible to shorten the course of the disease to a considerable extent.

W. A.

INCISED WOUND OF THE BALL OF THE THUMB (L. Championnière: *Journ. de Méd. et de Chir. prat.*, 1875, August, p. 345).—In this case there was a deep incised wound of the ball of the thumb, caused by fragments of glass, in which repeated secondary hemorrhages threatening

serious consequences occurred. Many unsuccessful attempts were made to check the flow of blood with the perchloride of iron, and fifteen days after the infliction artificial anæmia was produced by the use of Es-march's apparatus, and both ends of the cut vessel were ligated.

W. A.

DIPHTHERIA OF THE INTESTINE (A. Rajowsky: *Centralblatt für die Med. Wissenschaften*, No. 41, 1875).—From the observations of diphtheritic processes of the human intestine which he has made, Rajowski concludes as follows:

1. Diphtheria of the intestine is always preceded by a catarrhal affection.

2. The commencement of diphtheria is characterized by the deposit of a fibrinous exudation, which collects in the mucous membrane itself and on its surface.

3. This is followed by death of the tissue of the mucous membrane, and its metamorphosis into a granular mass containing albumen. This destructive process extends, and at the same time a hyaline metamorphosis of the blood-vessels appears in the altered tissues.

4. Micrococci and bacteria are found both in the altered and in the unaltered tissue, in the former in colonies, in the latter dispersed singly. Even at a time when the tissue has not become fluid, canals filled with bacteria can be found in the submucous layer. Experiments made upon rabbits show that diphtheria of the intestine can only be artificially induced by the injection of fluids containing bacteria into the blood after the intestinal mucous membrane has undergone changes of an inflammatory character.

From all these observations this important conclusion is drawn:

Parasites play an important rôle in intestinal diphtheria, but the tissues in which they are to flourish must be previously prepared by irritating substances. This inflammatory change of the mucous membrane is connected with the hyaline metamorphosis of the blood-vessels.

W. A.

CHANGES IN THE RETINA IN PERNICIOUS PROGRESSIVE ANÆMIA (Prof. W. Manz: *Centralblatt für die Med. Wissenschaften*, No. 40, 1875).—From observations of several cases of this disease, Manz concludes that the extravasations into the retina in pernicious progressive anæmia have a peculiar anatomical basis, and appear in this respect analogous to the so-called capillary apoplexy of the brain. It is, however,

possible that no effusion of blood may be present, and that only an aneurismal dilatation of the capillaries may be met with. The retina should therefore be carefully examined, even in cases in which investigation with the ophthalmoscope has given negative results.

W. A.

CURE OF ANEURISM OF THE EXTERNAL CAROTID ARTERY BY COMPRESSION (J. A. Marques: *Gazette Hebdom.*, 1875, No. 6).

—The patient was a Portuguese, aged 30, who for a year had had slight pain of an intermittent character in the neck and right ear. The diagnosis of aneurism of the right carotid was made, and treatment by digital compression commenced. During the first ten days pressure was made for five hours daily, and during the following twenty-five days for ten hours. The tumor, upon which bladders filled with ice had been kept, was, at the end of this time, hard and smaller in size, but pulsation continued. The patient refused all further treatment. After some time the pain in the ear and in the tumor became unendurable, and the patient sought relief in a hospital.

The same mode of treatment was adopted, and on the first day compression was kept up for seven consecutive hours. After the expiration of half an hour the patient fainted, but recovered when placed in the horizontal position, and the pressure was continued while he was in that position. Compression was kept up for several hours almost daily (once, indeed, being maintained for forty-one hours) for six weeks, at the end of which time a complete cure had been obtained. The attacks of fainting were no doubt due to disturbance of the circulation at the base of the brain, and to the same cause should be attributed the sleeplessness from which the patient suffered after recovery. During the forty days that the treatment lasted, compression was maintained for two hundred and eighty-three hours.

W. A.

DIGITALIN AND ITS ACID.—M. Tauret, whose observations on digitalin published in the *Journal de Pharmacie* were supposed to have shown that this substance exists in digitalis in the form of the tannate, denies this to have been his meaning, and now holds (*La France Médicale*, November 24, 1875) that digitalin is indeed a base, but that it combines in nature with some acid other than tannic, but as yet unknown.

x.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, DECEMBER 25, 1875.

EDITORIAL.

THE LONDON "LANCET" AND
AMERICAN HOSPITALS FOR THE
INSANE.

IN the London *Lancet* for November 13 is an editorial on the treatment of the insane, in which much reference is made to American hospitals, written in that arrogant, supercilious, Pecksniffian tone in which John Bull formerly so often indulged when discussing his cousins across the water.* The writer thinks there are two kinds of treatment of the insane still in vogue, the one "low and brutal," the other "humane." The gist of the article is a complaint, couched in no very gracious terms, and expressed rather by covert insinuation than by a fair and square charge, that, while his countrymen have chosen that better part, we are so insensible to the progress of improvement as still to pursue "the low and brutal" treatment of the insane, even in our hospitals. What it is, precisely, he does not specify. He does not charge us with using chains or straps, with beating or starving our patients, but asserts that, heedless of the great reform effected by Dr. Conolly, who abolished all mechanical restraint, we persist in the pestilent use of muffs, wristers, and camisoles. This, we suppose, is the bad and brutal treatment charged to us; and to the fact itself we certainly plead guilty. Mechanical restraint is used, more or less, we believe, in every hospital in the country; and long may it be before this mild and truly humane instrumentality is banished from our

hospitals by force of a mawkish sentimentalism or a slavish subservience to popular clamor.

In view of our benighted condition, we shall try to be docile under the rod of our English brethren, for the smart is undoubtedly meant for our good; but the following is a little too bad for any common endowment of mortal patience: "Nothing has been more conclusively proved by the experience of an extended practice than that the treatment of insanity with restraints is neither rational nor scientific. It is as completely exploded as the treatment of chorea by mechanical appliances. If the medical superintendents of American asylums resort to the old system, they do so in the face of patent facts, and their practice has no claim to be classed as medical, hardly can it be called humane." The writer complacently regards the practice of every civilized nation except Great Britain—the only one that has generally adopted non-restraint—as *proved* to be neither rational nor scientific. This proof, of course, is only his own opinion. There has always been, even in England, a strong dissent from the prevailing practice of non-restraint, and at no time have the signs of a great reaction been more obvious than they are now.

Where this critic finds the evidence of the bad and brutal treatment practised in our hospitals as one of the fruits of restraint, we cannot imagine, unless it may be in that veracious book of Mrs. Lunt, "Behind the Bars." The results of non-restraint in English hospitals he might have found in those blue-covered volumes published every year, as the Reports of the Commissioner in Lunacy. On looking over our own pile, seven in number, we observe in all of them, with a single exception, some notice of what are gingerly called "Casualties," that happened during the year, in one hospital or another where no restraint was used. They comprise cases of homicide inflicted by attendants or

* "Of all the sarse thet I can call to mind,
England *doos* make the most onpleasant kind;
It's you're the sinner ollers, she's the saint,
Wut's good's all English, all thet isn't ain't."

Hosea Biglow, vol. ii., 1875.

patients, suicides, burns, scalding, fractured ribs, black eyes, and extensive bruises. Here is the way the record reads in the table of contents of the Twenty-sixth Report (1871):

"Casualties in Asylums and Licensed Houses."

"Murder of attendant at West Riding.

"Homicide at Newcastle Borough Asylum.

"Homicide at Grove Hall, Bow.

"Death from fractured ribs at Nottingham Asylum.

"Death from ruptured kidneys, etc., at Hanwell.

"Death by burning of two patients at Haydock Lodge.

"Death by burning of patient at North Riding Asylum.

"Death of a patient at Hadham Palace from tetanus following burns.

"Death from scalding in a bath at Surrey Asylum.

"Death on the railway of a patient belonging to Colney Hatch."

If it be said in reply that all this has been changed and become a thing of the long-since past, we will add that in the last Report (1874) of the Commissioners in Lunacy for Scotland, the bare enumeration of casualties in the hospitals in that country for the year 1874 occupies one page of large octavo, fine print. It is made up of suicides, fractures, flesh-wounds, falls, bruises, and contusions. The record of the Fife and Kinross District Asylum, an institution in which a great advance is supposed to have been made by abolishing locks and bars and many other means of restraint, and which, for that reason, has been enthusiastically recommended to us for imitation by a public functionary of an Eastern State, runs thus:

"Fracture of the ulna in a struggle with an attendant. Fracture of the right radius from having been pushed over by another patient. Severe cut above the eye by falling out of bed on the chamber-pot. Suicide by drowning in the case of a patient absent on pass."

Two cases are recorded in other hospitals of death from falling or jumping out

of the window,—a casualty not calculated to induce us to abolish window-guards.

Now, we believe that under the judicious use of restraints the most of these casualties would not have happened. We shall be told, very probably, that they were not the result of non-restraint, but rather of cruelty or lack of vigilance on the part of attendants. And this is precisely the main reason why we here in America prefer the use of mechanical restraints, as far more reliable, less annoying, and more humane than the hands and eyes of attendants. If it be contended that these casualties are not fairly attributable to non-restraint, may not we say with equal justice that such casualties in our asylums (for we admit that they do occur, though far less frequently than in the English asylums) are not fairly attributable to restraint?

Among the sins of commission and omission laid at our door, there is one, and only one, specifically and definitely made; and for this we are thankful, because we are thus enabled to meet it as definitely as it is made. "Our friends across the Atlantic," it is said, "resort to contrivances of compulsion; they use, at least, the hideous torture of the shower-bath, *as a punishment*, in their asylums, although it has been eliminated from the discipline of their gaols." As no authority is given for the fact,—probably it would not have looked well in a scientific discussion,—we can only give it a flat denial. Now, we have personal knowledge of nearly every hospital in the Northern and Middle States, and can positively say that no shower-bath can be found in any one of them. Of others we have no personal knowledge, but we have good reason to believe that the same is true of them.

Again, our critic, whose courtesy bears but an insignificant proportion to the extent of his ignorance and credulity, tells his readers, in great sorrow of spirit, no doubt, at being obliged to bear such painful testimony, about the "ignorance and mis-

conception of our brethren in America ;" and says that our "medical superintendents leave the care of patients, practically, to their attendants, while devoting their own energies principally to the beautifying of their colossal establishments." That these gentlemen do devote some of their energies to the purpose here named, we are glad to say, is virtually true ; and we trust they never will do otherwise. We hope they will always regard their buildings and grounds as most efficient parts of the instrumentality devised by the beneficence of the age for the care and cure of the insane. We trust they will always feel that whatever renders them more attractive, that whatever enlarges their means of occupation and amusement, is a legitimate object of attention, and worthy of the strongest energies. As for the first part of the charge, there is only one word in the language, and that is a very short one, which fitly designates it ; and there we leave it.

Our critic seems to be hardly better informed respecting the insane-hospitals of his own country. "Seclusion," he says, "even in its most harmless form, has been shown to be rarely, if ever, requisite." The truth is, seclusion, meaning thereby confinement of the patient to his room, is practised more or less in every hospital in the kingdom, and mostly as a substitute for restraint. And a very poor substitute it is. From the manner in which he speaks of shower-baths in our hospitals, one might suppose that no such instrument of torture could be found in any English institution. Not many years ago, —subsequent, certainly, to Dr. Conolly's blessed reform,—the Surrey Hospital obtained an unenviable notoriety by means of one of these instruments, one Dolley, a patient, having come to his death, according to the inquest, from the shower-bath and tartar emetic combined. And the Commissioners in Lunacy, we recollect, improved the occasion, not to banish the

shower-baths from the hospitals, but to lay down some rules respecting their use.

We had intended to notice one or two other statements, but we fear we have already trespassed on the patience of our readers, who have had enough to satisfy them respecting the quality of our critic. If, in future, before he writes about American hospitals, or on any other topic, he will obtain a little information on the subject, he may not much instruct his readers, but he will avoid an occasion for provoking bad feeling and making himself ridiculous.

CORRESPONDENCE.

AMERICAN AND ENGLISH AUTHORS.

1 BEDFORD SQUARE, LONDON, November 16, 1875.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

SIR,—My work on the microscope, which appeared upwards of one-and-twenty years ago, has stood the test of time and public criticisms, and, I should have supposed, long since passed altogether out of the latter field. If, however, it has not done so, I can assure you I shall not now come to America for a certificate of its usefulness and practical nature. It is quite sufficient to know that, since its first publication, two years before Carpenter's well-known work appeared, it has had a host of imitators and but few rivals, as my publishers can testify and as its unprecedented sale shows. I am therefore at a loss to conceive why any one who makes a pretension to an acquaintance with "*practical microscopy*" should be so dishonest as to give his readers a *garbled quotation* from my book.

My attention has just been called to a review of a Mr. John Phin's book "*On the Selection and Use of a Microscope*," which appears in your *Medical Times* of October 16, and I must therefore request you to let me say a word in reply. Your reviewer writes, "Mr. Phin evidently does not deserve the remark which he so sharply applies to Hogg's advice, 'that in cleaning lenses one ought to use a piece of leather slightly impregnated with *brick-dust*,'" etc. Now, if you, sir, will do me the favor to turn to my book, you will find that Mr. Phin, either in ignorance or wilfulness, has added the *brick-dust*, for it is not to be found in my pages. In the few "*Preliminary Directions*," given at the commencement of chap. iii. page 159 (eighth edition, 1870), you will read instructions of a very precise character on the score of keeping out dust and dirt, and then follows a recommendation to "keep a piece of well-dusted and very dry

chamois-leather, slightly impregnated with the finest tripoli or rotten-stone powder, in a small box, to wipe the glasses." Not a word about *brick-dust*, which, it is well known, is a totally different, coarse material. I suppose, however, Mr. Phin never heard of tripoli, or is ignorant of the fact that practical opticians use this substance, as well as rotten-stone and putty-powder, for wiping and polishing lenses.

I remain, sir, your most obedient servant,
JABEZ HOGG.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, OCTOBER 14, 1875.

The PRESIDENT, DR. WM. PEPPER, in the chair.

(Continued from page 141.)

Tumor (glioma) in left lobe of cerebellum: headache, staggering gait, excessive vomiting. By DR. WM. PEPPER.

MISS W., aged 20, enjoyed general good health until the latter part of 1874. She had, for about a year before that, been noticed by her friends to hold her head towards the right side. In March, 1875, vomiting began, and continued, with occasional intermission, until her death, on October 12. The vomiting was peculiar; it was not influenced by the character of the food; it frequently occurred early in the morning, when she first moved in bed; frequently recurred as often as eight, twelve, or even more times in the course of the twenty-four hours. There was no pain in the stomach, though later there was circumscribed tenderness in the epigastrium. The matters vomited consisted of food, more or less altered, or of acid fluid. During menstruation, in September, repeated and free vomiting of blood occurred, while at the same time the menstrual discharge was checked. On other occasions a few drops of blood were observed in the matters vomited, but these probably came from the throat or from her gums, which were disposed to bleed. There was no constipation.

In April she began to complain of headache, recurring in severe paroxysms several times a day. She described it as being deep-seated, at the vertex or temples, and extending down over the left eye. It was at one time absent entirely for seven weeks. She was also noticed to stagger slightly in her gait, especially on first rising after being seated for some time. On one or two occasions she complained of difficulty in walking, saying that she tired easily, and could only walk slowly, and not as she had formerly been able to do. Her eyes were naturally prominent: after the early spring of 1875 her eyes were occasionally sensitive

to light, and soon grew dim on using them. On several occasions transient diplopia was observed; but her vision remained quite good until the close, so that she could read small type for a little while, or see small objects even at some distance. When lying in bed on her right side, the eyes turned to the right. No ophthalmoscopic examination was made.

She was confined to bed for the greater part of the time, and lay continually on the right side. Emaciation progressed with moderate rapidity. She became very prostrate, and died October 12. Her mind remained perfectly clear, and memory good, until the close.

Post-mortem examination, thirty-five hours after death.—*Head*. No change in bones. Dura mater healthy. Hemispheres seemed healthy. No effusion at base; indeed, there was remarkably little effusion, as increased tension caused its withdrawal. On cutting tentorium and turning cerebellum out from its fossæ (after severing spinal cord), an oval tumor, one and a half by one inch, rolled out from the side of the left lobe of cerebellum. It was pinkish gray, soft, and fleshy in appearance. The dura mater was smooth and healthy in appearance where it lay; it had no adhesions. It lay in a cup-shaped cavity hollowed out of the substance of the cerebellum, and was merely attached and covered by most delicate cellular tissue.

There were no evidences of direct pressure on pneumogastrics, though of course there must have been greatly-increased tension and much irritation.

Rest of cerebellum apparently healthy.

Thorax.—Heart healthy; no pleural effusion. Right lung adherent quite closely. Hypostatic congestion postero-inferiorly. A small cretaceous nodule in right upper lobe, one inch deep in tissue.

Abdomen.—Fair amount of fat in abdominal walls. No peritonitis.

Stomach contained several ounces of slate-colored fluid. No ulcer. Extreme congestion, especially towards cardiac orifice, where it was very fine; injection of minutest capillaries. Some mammillation of the mucous membrane towards pyloric orifice. In a few places mucous membrane looked as though there had been hemorrhagic erosion which had healed. No thickening of its walls; no obstruction of its outlets.

Intestines.—Colon much distended with gas and fæces. Ileum extremely contracted. No enlargement of abdominal glands. The other abdominal viscera healthy. Uterus healthy. Ovaries contained recent corpus luteum.

The tumor was referred to the Committee on Morbid Growths, which reported, Nov. 11, 1875:

"Your committee have examined Dr. Pepper's tumor of the cerebellum, and pronounce it to be a *glioma*.

"Microscopically, the growth is composed of numberless cells, whose physiological type is

found in the neuroglia. In general they are round or oval, and send out delicate fibrillæ in every direction. These processes or fibrillæ are of strikingly dark contour, often slightly wavy and sharply bent. The cells are about thrice the size of colorless blood-corpuscles; they are nearly throughout multinuclear; usually they contain two large, round, or slightly oval nuclei in close apposition, each of these again enclosing two or more nucleoli. The body of the cell is homogeneous, faintly shining, yellowish.

"The peculiarity of these cells lies in the fact that they are not limited by any membrane, but, on the contrary, send out from their entire periphery fine fibrillæ. These small round cells with thin long processes radiating out in every direction, give them, when isolated by careful teasing, a spider-like appearance, the 'Spinnenzellen' of the Germans.

"Whilst still in their position, the extension of these processes from the protoplasm of the cells is almost impossible of recognition, and very apt to be mistaken for intercellular substance, but in reality there is no intermediate matter between the cells. Not infrequently these long, fine fibrillæ are attached to the body of the gliomatous cell by homogeneous pedicles, as represented in the accompanying drawing."

Tuberculous laryngitis. By Dr. LOUIS STARR.

M. M., aged 27, a sailor, was admitted to the medical ward of the Episcopal Hospital on September 6, 1875. His family history was bad, his mother and mother's sister having both died of phthisis. He had been temperate in his habits, had never had syphilis, and, though always feeble, had no well-defined symptoms of ill health until the winter of 1873, when he began to cough and to lose flesh. The cough, which at first was infrequent and dry, gradually grew more troublesome. He had several attacks of hæmoptysis, and soon afterwards commenced to expectorate muco-purulent sputa. These symptoms progressed steadily up to July, 1875, when his voice became hoarse, and he noticed slight pain in the region of the larynx on swallowing. He did not give up work, however, before the middle of August. At that time the pain, on deglutition, was so great that it was almost impossible for him to swallow solid food, and, not being in a position to obtain proper liquid diet, he became exceedingly prostrated. On admission, he was very weak and much emaciated, his tongue was brown and dry, there was urgent thirst, and he craved food, but was totally unable, on account of the pain produced, to swallow anything except liquids, and these only in small quantities. His bowels were loose. Besides the pain occasioned by deglutition, there was constant soreness in the larynx, and a sensation of tickling which gave rise to violent paroxysms of coughing. His

voice was very husky, at times almost suppressed, and the act of phonation seemed to cause suffering. The respiratory movements numbered forty-eight per minute. The cough was painful and severe, and was accompanied by the expectoration of nummular muco-purulent sputa, most abundant in the early part of the day. His pulse was 120, quite feeble, and he had well-marked hectic and night-sweats. Physical exploration of the chest revealed the presence of a large cavity, surrounded by an area of solidification in the upper lobe of the left lung, while at the apex of the right lung there was slight dulness on percussion, and broncho-vesicular breathing. There was no cardiac murmur. A satisfactory laryngoscopic examination could not be made, because of his weakness and the great irritability of his throat: the only view obtained was of the epiglottis and false vocal cords; the former was partly hidden by a layer of mucus, and the latter appeared to be congested and thickened. For a week after coming into the hospital his general condition improved, but he subsequently sank slowly, and died on September 30.

The *autopsy* was made eighteen hours after death. The body was greatly emaciated. The upper lobe of the left lung was firmly adherent to the chest-wall, and contained a cavity about as large as a hen's egg, lined by a thick, smooth membrane, and partly filled with purulent fluid; the remainder of the lobe was infiltrated by a caseous material, which had commenced to undergo softening, and broke down readily under the finger. Throughout the lower lobe several small collections of tubercle were scattered. The apex of the right lung was occupied by a tuberculous deposit, the rest of the lung being healthy. The heart was small and somewhat fatty, but all the valves were normal. On removing the larynx, what was left of the epiglottis, viz., the lower two-thirds, presented a peculiar worm-eaten appearance, due to the existence of deep ulcers with irregular edges. These were most numerous on the laryngeal surface. The upper margin of the epiglottis was thin and very ragged; in its centre there was a perforation, and on either side of this the tissue-destruction had been so great as almost to separate the middle from the lower third of the cartilage. The mucous membrane lining the interior of the larynx was thickened and ulcerated; the ulcers were situated one on the right vocal cord, another in the thyroid angle and on the right side of the thyroid cartilage, and a third in the inter-arytenoid space. There was also partial ossification of the cricoid cartilage. None of the abdominal viscera exhibited any abnormal appearances except the mesenteric glands, some of which were enlarged.

Dr. R. M. BERTOLET said what struck him as most remarkable in this specimen was the entire escape of the vocal cords and the aryte-

noid cartilages, which are so commonly involved. The fact that the ulceration is at the apex of the epiglottis rather than at the base is a suspicious one, this being common in syphilis rather than in phthisis, although at times we have the ulcerations of the latter disease also destroying this appendage entirely; more frequently, however, the glandular structures at the base of the epiglottis are the site of the ulcerations.

TRENTON MEDICAL ASSOCIATION.

STATED MEETING, OCTOBER 12, 1875.

DR. WILLIAM ELMER, Vice-President, in the chair.

DR. GREEN made the following remarks, with report of case.

Hydrotherapeutic treatment of malignant scarlatina, with case.

"In all febrile exanthematous diseases, where the pathognomonic eruption is deficient or tardy, accompanied with excessive increase of the temperature of the skin, the judicious use of *cold water*, either in the form of affusions, baths, packs, or sponging, almost always has a very marked salutary effect not only as regards the skin-affection, but the nervous system also is so markedly impressed that whereas before its use the patient is perhaps restless, excited, or even delirious, afterwards he is comparatively calm and quiet or disposed to natural sleep.

"Dr. Thomas, in his monogram on scarlatina in Ziemssen's *Cyclopædia of the Practice of Medicine*, says that in all cases, but especially malignant ones, the use of cool baths is judicious. The temperature of the baths must be graduated according to the intensity of the fever. During the high fever in the beginning of scarlatina, Ziemssen's baths, in which the water is gradually cooled down, should be used; and in the following days, as the fever sinks the temperature of the baths should be gradually increased.

"A recent writer in the London *Lancet*, Dr. Eddison, reports several cases of scarlatina where the temperature ran high, with delirium, which were freely immersed in tepid baths, gradually cooled down, with almost invariable decline of heat of surface and general improvement of cases.

"The baths were even often prolonged from fifteen to sixty minutes in duration, according to the severity of the fever and its behavior while in the baths. He found that the use of the baths did not provoke inflammation of the kidneys, as some feared, nor was there any material disturbance of their function manifested during convalescence.

"Recently, in my own practice, I have had a very striking instance of its great value in scarlatina, to wit: Gertrude McG., aged 3 years, was taken sick on the evening of Sep-

tember 28, with high fever; on the following morning an eruption resembling scarlatina, mixed with large blotches of hives, was observed by the mother covering the front of the abdomen, which produced excessive restlessness. The fever was now increased, nausea with frequent vomiting followed, a brisk diarrhoea also set in, and no sleep had as yet been obtained. This was the condition of the little one when I was called in on the 30th. On learning the previous history of the case, and examining the fauces, which were found to be highly congested, the tonsils enlarged, and here and there dotted with ulcerations, and the fact that considerable scarlatina had prevailed in that vicinity, I diagnosed scarlatina.

"A cooling febrifuge was directed, and the bowels were controlled with a mild astringent. I directed the mother to sponge the whole surface of the skin with cool water every two hours. This was persevered in for twenty-four hours, with no improvement. On the following day I found the child delirious, temperature 106°, pulse 160, eruption wanting, feet cold, head intensely hot, respiration unnatural, slow, and labored. These alarming symptoms indicating that death was very imminent, and seeing that something prompt and energetic must be resorted to, I ordered the little one to be placed every hour in a tub of lukewarm water, and cold water to be added until the temperature of the skin should be reduced to about the normal standard, the water to be poured from a height on the head and nucha; after the baths the little one to be wrapped in dry woollens, and bladders of ice to be applied to the scalp. These directions were faithfully carried out, and on the following day, to my great satisfaction, a remarkable change was manifested. The eruption had returned, the mind was restored, temperature 98°, pulse 100, skin cool and moist, and refreshing sleep had been produced, after several baths had been taken. Thus, no doubt, the life of the little one had been saved. The case convalesced kindly. No serious disturbance of the kidneys was produced; desquamation of the skin was very general. There were no sequelæ requiring treatment, except enlargement of the cervical lymphatic glands, which, however, did not suppurate.

"The remarkable effects of the above treatment lead me to urge the profession to make use of the same antipyretic treatment in similar cases."

Dr. WARMAN remarked that he had employed this treatment in a limited sense,—such as sponging the surface frequently, and the use of the wet sheet, but had never resorted to the use of the cold bath as recommended by Ziemssen. He also stated that he had seen the case reported by Dr. Green in consultation, and had witnessed the wonderful results of the cold bath in that apparently moribund child, and that he should most certainly give that treatment a trial on the first opportunity.

Case of soft chancre, with secondary symptoms.

Dr. RIBBLE reported the following case.

"A few months ago a gentleman called at my office to consult me about his case, which presented the following symptoms. Rash over the whole body, partly pustular, particularly over the fore-arms and legs, and so painful as to render the friction of the clothes during movement almost unbearable; severe sore throat, with extensive ulceration; hair rapidly falling out; and 'pain in his bones.' He gave me the history of his case; as follows. Some six weeks before I saw him, a small ulcer appeared on the prepuce a few days subsequent to a suspicious connection. He consulted a physician at once, who pronounced it a chancroid, treated it with nitrate of silver and black wash, and in a week or two it was completely healed over, and he was further assured, according to popular teaching, that he had nothing to fear. My diagnosis was, of course, secondary syphilis, which was proved correct by the case being rapidly relieved by anti-syphilitic treatment. Now, the point in this case which is particularly worthy of notice is that this was undoubtedly a soft chancre, which, according to the teachings of most of the writers on syphilis, is never followed by secondary troubles. Had this case occurred alone, I should at once have doubted the correctness of the observations; but, as I have seen numbers of the same sort, about which the most careful examination revealed no induration, which were followed by secondary affections, I have no hesitation in accepting the statement as correct, particularly since, after the first ulcer was healed, nothing further either in the shape of ulcer or induration ever appeared in the locality.

"While this gentleman was under treatment, another consulted me, suffering from what would undoubtedly be regarded as a soft chancre, which readily yielded to treatment, and in a week was well, and was followed by no symptoms that indicated any poisoning of the system; but while the latter gentleman was suffering from the chancre, which at the time was so trifling as to escape his notice, or at all events not to excite any suspicion that it was more than a mere pimple, he had connection with a young and healthy lady, to whom he communicated the disease. Restrained by delicacy, she did not consult me till secondary symptoms had already shown themselves, and she suffered severely. I cite but these two cases; I could give numbers more, where what the most skilful syphilologist would undoubtedly pronounce but soft chancre—chancroids—were followed, the one directly and the other indirectly, by secondary affections.

"Jonathan Hutchinson, in a recent clinical lecture published in the London *Lancet*, in order to reconcile his observations with popular teachings, attempts to explain the duality

of syphilitic virus by his modified pus-theory and the mixture of the two; but, as his practice is better than his teaching, he evidently has but little faith in the duality of syphilitic poison.

"With all respect to John Hunter and his followers, I believe that there is but one kind of spore that produces syphilis, and that any chancre if allowed to run on without treatment may be followed by constitutional poisoning; and I treat every case that comes under my care in accordance with that theory.

"At all events, I escape the slight unpleasantness of finding my patient return after five or six weeks, covered with eruption from head to foot, after I had sent him out from my office with the assurance—based on the duality-theory—that he had nothing to fear."

REVIEWS AND BOOK NOTICES.

THE STUDENT'S GUIDE TO HUMAN OSTEOLOGY. By W. W. WAGSTAFFE, Assistant Surgeon to and Lecturer on Anatomy at St. Thomas's Hospital. Philadelphia, Lindsay & Blakiston (reprint), 1875.

This little book is a fair exposition of the leading facts of osteology as conventionalized for the needs of students of medicine. It is abundantly illustrated, both by wood-cuts and by lithographic plates. Many of the latter are excellent, such as those of the cranial bones; while others are indifferent, and some should have been condemned.

Much attention is paid in the text to the disposition of the fibres of the cancellated portions of bone, which subject, however, is by no means exhaustively or even completely treated. The method of studying the carpal and tarsal bones, as disposed in axial and not transverse rows, is properly adhered to.

The explanation of the mechanism of the joints is tolerably full, and in some points original. In the main, the ideas of Weber and Henke are followed, although the illustrations are mostly from Ward. Oddly enough, the many facets of the patella are duly figured, but not described. We think, on the whole, that the author has fairly accomplished the main object of his labor, viz., "to describe the bones of the human skeleton with accuracy, but without wordiness, and as a secondary object to interest the student in the mechanical wonders of his framework." Truly, the "student" should appreciate, after reading this little volume, how fearfully and wonderfully he is made.

H. A.

A TEXT-BOOK OF HUMAN PHYSIOLOGY. By AUSTIN FLINT, JR., M.D.

This enormous volume contains within its covers about a thousand very large pages of print, finer than that of any other medical book in memory at present writing. It is

practically a reprint of the five-volume work of its author, with the omission of the references and the addition of numerous illustrations, in the form of lithographs and woodcuts, many of them exceedingly fine. It is stated in the preface that the text is condensed, but in various parts which we have examined the wording in the two works is identical. This cheaper form of the very elaborate Physiology of Dr. Flint will no doubt greatly enhance its popularity, and benefit both its author and the American medical public by securing for it a very wide circulation.

A SYSTEM OF MIDWIFERY. By WILLIAM LEISHMAN, M.D. Second American, from the Second and Revised English Edition. With additions by JOHN S. PARRY, M.D. Philadelphia, 1875, H. C. Lea.

The appearance of a second edition of this system is the fulfilment of the prophecy which we made in a former review, that the work was destined to "become a favorite." The additions by Dr. Parry are usually not abundant, but certain places which we pointed out as the weak part of Dr. Leishman's handicraft have been greatly strengthened by abundant and very judicious addenda.

HINTS IN THE OBSTETRIC PROCEDURE. By WILLIAM B. ATKINSON, M.D. Philadelphia, 1875.

This unpretentious duodecimo of ninety pages is based upon the Presidential address delivered some time since by its author to the Philadelphia County Medical Society. Containing much useful information founded upon the personal experience of its author, it must prove of value to the very wide circle of the profession who will be led to purchase it by their acquaintance with the author or his reputation.

ILLUSTRATIONS OF CLINICAL SURGERY: Consisting of Plates, Photographs, Woodcuts, Diagrams, etc., illustrating Surgical Diseases, Symptoms, and Accidents, also Operative and Other Methods of Treatment. By JONATHAN HUTCHINSON, F.R.C.S. Philadelphia, Lindsay & Blakiston.

This magnificently illustrated work, if the present number be a fair example, we can commend to all those who have a taste for medical fine arts. But we confess that even the elaborate and accurate chromo of the rodent ulcer does not satisfy our craving for the beautiful, and that the skill lavished upon the male genitals deformed and eaten by chancres renders the object to us no more attractive. However, *de gustibus non disputandum*; and the artists have certainly performed their allotted tasks exceedingly well.

Mr. Hutchinson states in his announcement that during the last twenty years he has acquired a large collection of drawings, photographs, etc., and that he has reluctantly yielded to the solicitations of his friends to

publish them, having been heretofore deterred by the heavy expense. The work is to appear in separate fasciculi complete in themselves; its author distinctly disavowing any pledge as to the extent to which it will be carried. The following list of subjects will give an idea as to the scope of the undertaking: Elephantiasis, Rodent Ulcer, Examples of Asymmetry in Disease, Primary Venereal Sores, Morbid Conditions of Nails, Non-Venereal Chancres (*sine coitu*), Encephalocele, Dislocations and Fractures of the Shoulder, Lymphadenoma with Splenic Deposits, Epulis, Xanthelasma, Hernia, Myeloid Tumors, Syphilis, Visceral and External, Chancres from Vaccination, Traction of Neck of Femur, Teeth in Constitutional Syphilis, Epithelial and Melanotic Cancer, Symptoms displayed by Iris and Pupil, Joint-Changes in Gout and Arthritic Rheumatism, Operations for Cataract, Ophthalmoscopic Illustrations, Traumatic Meningitis, Morbid States of the Tongue, Splints, Various New Instruments, Hare-Lip, etc., etc.

GLEANINGS FROM EXCHANGES.

A NEW INSTRUMENT FOR PELVIC DRAINAGE (*The Boston Medical and Surgical Journal*, November 17, 1875).—Dr. George H. Bixby describes a new instrument for the ready and effective use of the double current in the treatment of suppurating cavities, and in pelvic drainage. It consists essentially of a canula, divided into two chambers by a horizontal septum and fitted with a flexible double trocar. In employing this instrument in cases of pelvic abscess, he places the patient in the lithotomy position, or on the left side, with the limbs sharply flexed. The most prominent part of the tumor having been ascertained, and the seat of the pulsation of large vessels avoided, the trocar is introduced into the vagina upon the finger of the left hand and placed firmly against the tumor. With the left hand in the vagina, controlling the extremity of the trocar, the puncture is made in a downward direction with a firm but steady force. The peculiar impression imparted as the instrument passes into the cavity is quite unmistakable. The previous arrangement of the tubes prevents a sudden escape of the fluid. The trocar is now withdrawn sufficiently to conceal its point, and the tapes for retention applied. The last step is best effected by passing them through the staple, around the limb, under a bandage around the waist, and finally tying or, what is better, buckling the extremities together in front. The patient being on the left side, the right tape of course is first applied, and will serve to retain the instrument until she is turned upon the back, when the other is adjusted. If the operation is performed with the patient on her back, of course both tapes are put in

position at once. We may evacuate the abscess at once, but the better plan is to attach to the afferent branch of the canula the tube of a fountain syringe charged with a disinfecting solution and suspended or held six feet above the bed, at the same time untying the knot in the efferent branch and placing its extremity in a vessel on the floor beside the bed. The trocar is now withdrawn without fear of displacement, the central opening of the canula is closed with a stopper, the stop of the syringe is opened, and the contents of the abscess are forced out by the strong current.

The instrument may also be used in cases of retro-uterine hæmatocele in pelvic drainage after ovariectomy and other abdominal operations, and in the treatment of the uterine cavity in acute puerperal endometritis, and in offensive post-partum vaginal discharges. Dr. Bixby claims originality only for the double trocar, the double canula being mainly an improvement on those already in use.

PNEUMATOMETRY (*The New York Medical Journal*, November, 1875).—At the close of an elaborate article on this subject, Dr. Louis Elsberg comes to the conclusion that with pneumotometry the case is the same as it is with the other methods of examination, especially percussion and auscultation; it does not directly point out the presence of a particular disease, but it reveals certain abnormal conditions which may be caused by various accurately recognizable diseases, between which differential diagnosis has to decide. By means of the pneumatometer, dyspnoea, difficulty of breathing, which could hitherto be denoted by indefinite expressions only, can be characterized with exactitude both qualitatively and quantitatively,—the first by showing whether it is inspiratory or expiratory, or both combined, the latter by determining in figures its precise extent or degree. And not only can the difficulty of breathing be determined when it exists subjectively as well as objectively, but in the first beginnings of a respiratory insufficiency, before the patient himself is conscious of it, except, perhaps, upon very unusual exertion, before we can discover its existence by any other method of examination hitherto known, the pneumatometer may indicate a deviation from healthy respiration. Again, in obscure cases of differential diagnosis, the weight of the evidence supplied by the pneumatometer may turn the scale in the right direction, when this might not be discernible without its revelation. The importance and value of pneumotometry can, therefore, not be doubted, and, without allowing it to take the place of other means of diagnosis, to it should unhesitatingly be awarded a prominent place alongside of the recognized and not-to-be-omitted methods of physical examination.

STRAPPING THE BREASTS TO ARREST LACTATION (*New York Medical Journal*, Novem-

ber, 1875).—Dr. W. W. Munson gives the following directions for strapping the breasts in cases where it is desirable to prevent or arrest lactation, or to cut short a commencing mammary abscess. In the former class of cases he has never failed when this treatment was adopted, and he has been almost equally successful in the latter. Let the first strip be put on so as to hold the breast well up by itself alone, whichever direction it is made to take. Commence by placing a strip laterally beneath the breast, about half-way between the nipple and lower margin, draw the gland well up, and attach one end high up on the sternum and the other end high up under the arm. The next strip is placed at right angles to the first, close to the nipple. Apply to the breast first, draw it well up and fasten the upper end, letting it pass over the shoulder, then draw down the lower end firmly and fasten it. Do not skip the nipple or cover it, but cut holes through the strips that pass over it, and let it project through. This is to allow the milk which may ooze out for the first few hours to escape, without burrowing beneath the plaster, pushing it off, and making a hot, disagreeable, irritating poultice. Several thicknesses of soft cloth should be placed over the nipple (when pervious), to absorb the milk that escapes. This should be renewed as often as it becomes saturated.

PROPYLAMIN IN ACUTE RHEUMATISM (*The Lancet*, November 6, 1875).—Dr. Lee has treated twenty-eight cases of acute rheumatism with a solution of one gramme of propylamin and ten of sugar in one hundred and twenty grammes of peppermint-water, of which a tablespoonful was given every two hours; altogether from three to five grammes were so taken by each patient, whose limbs were bandaged with cotton-wool and cardboard. All the twenty-eight cases suffered from multiple joint-affections; in fourteen cases the disease disappeared for the first time, in the other fourteen it was recurrent once or repeatedly. Five cases were complicated with slight, five with severe affection of the heart, one with acute œdema of lungs, and one with diphtheria. All were restored to perfect health and military duty except one. The average duration of the illness in these cases was 17.7 days per head; none was discharged before full recovery was proved by increased weight of body and gymnastic exercises. The effect of propylamin is summed up as follows: 1. The disease becomes very soon subacute, and remains so to the last. 2. The sedative effect on the nervous system is shown by decreased tension in the circulatory apparatus; pulse and respiration become slower, and high fever decreases within thirty-six hours. 3. With at first profuse, then more gentle perspiration, pain decreases very markedly. 4. The color of the skin acquires a peculiar grayish tint.(?) 5. Sleep quickly returns, and is not interrupted by pain. 6.

With a cleaner tongue appetite returns fast. 7. The quantity of urine is not much increased; it is mostly clear and transparent, only slightly acid, and with little sediment. 8. All patients took the drug without dislike; it was never applied externally.

MEDICO-LEGAL ASPECT OF ABORTIONS (*The Obstetrical Journal*, October, 1875).—

Dr. Leblonde has collected a series of eleven cases from which he endeavors to prove the medico-legal value of the integrity of the membranes in abortions in the early months of pregnancy. His conclusions are: 1. When abortion occurs "en bloc,"—i.e., the embryo is contained in the sound membranes which are unbroken,—abortion is probably spontaneous, or at least has not been produced by agents which determine the expulsion of the ovum without implicating the membranes. 2. When the membranes are ruptured, but healthy, in all probability abortion has been provoked. 3. When the membranes present pathological alterations, we can form no conclusion from an examination of the expelled product, though probably the abortion results from diseases of the ovum and is due to spontaneous production.

CHLORAL IN PUERPERAL CONVULSIONS (*The Obstetrical Journal*, October, 1875).—

Dr. Portal relates three instances where chloral was successfully employed. Albuminuria was present in each. The first was attacked six hours after labor, the two others during parturition. One was delivered naturally, during the attack, of a still-born child; in the other case, forceps were applied, on account of the pains having disappeared when the attack had ceased. The first had twenty-four attacks, coming on regularly every quarter of an hour; the second, eight; and the third, seven attacks. Ninety grains of chloral were administered in each case. In the two latter twenty-five milligrammes of morphia were also injected. All the patients recovered. In six previous cases treated by leeches and by inhalation of chloroform, the author had "six deaths to deplore."

AMPUTATION OF CARBUNCLE (*Trans. of the Med. Soc. of the District of Columbia*).—Dr. Triplett, at a recent meeting of the Society, called attention to his mode of treatment of carbuncle, which is by amputation, and cited two cases in which this method seemed to have produced excellent results. In the debate which ensued, he held that nothing in the principles or practice of surgery forbade the operation, and that it was only aiding and anticipating natural processes to remove the slough as soon as possible.

A USEFUL METHOD OF EXCISION OF THE ELBOW-JOINT (*The Lancet*, November 13, 1875).—Mr. C. F. Maunder calls attention to his method of excision of the elbow-joint, by means of which he claims that active extension by the triceps may certainly be obtained. Briefly put, his object is arrived at by avoiding

all transverse section of the soft parts lying between the point of the olecranon and the external condyle of the humerus. In this way the continuity of muscular and aponeurotic structures passing from the arm to the fore-arm is not destroyed. He relates some very successful cases operated upon in this manner.

AMPUTATION AT THE HIP-JOINT (*The Lancet*, November 13, 1875).—Mr. Rushton Parker relates an interesting case of amputation at the hip-joint, and calls attention to the fact that amputation at the hip-joint, in cases of disease in general, and in exhausting inflammation of joint and bone in particular, is by no means an operation of dangerous magnitude. Amputation at the hip-joint, and also high up in the thigh, in cases of accident, is performed under circumstances attended with a high mortality, and is a desperate undertaking. In his case the patient was a boy who had suffered for eighteen months from inflammation of the joint, and had numerous sinuses, with erosion of the head of the femur, and was much emaciated. Excision was performed, but in a few months it became evident that the boy was sinking, and it was decided to amputate. The operation was the one of transfixion, with a long anterior and a shorter posterior flap. The blood of the diseased limb was previously returned into the rest of his body by elastic bandaging, and retained there by an india-rubber cord wound obliquely round the perineum and corner of the pelvis, over a pad laid on the external iliac artery. The cord was prevented from slipping down on the outer side by being looped over a bandage which was tightly wound round the pelvis transversely. The operation was almost bloodless, less than an ounce of blood being lost. Ligatures of carbolized catgut were used, and the child laid on his belly for the first few days after the operation, on account of a small sacral bed-sore.

He lay in bed for three or four months, and was discharged just five months after the amputation. By that time he was fat and well, though a sinus or two remained. He was last seen about ten months after the amputation, and was quite well in general respects, though a single sinus still remained in the stump.

PUERPERAL FEVER (*The Medical Record*, October 30, 1875).—In a report made to the New York County Medical Society on an epidemic of puerperal fever which occurred in the lying-in ward of Bellevue Hospital, Prof. W. T. Lusk drew the two conclusions:

First, puerperal diseases may be engendered by atmosphere alone. The nature of the poison is conjectural, but removal of patients to an unaffected locality changes the character of the disease, and the closure of the infected ward for three or four weeks usually restores it to a healthy condition.

Second, in distinction from the above, there is a form of puerperal fever poison with immensely contagious properties, not primarily

derived from a miasm, but capable of generating a most fatal disease.

ABSCISS OF LIVER OPENING INTO THE PLEURA AND BRONCHI (*The New York Medical Journal*, December, 1875).—A patient complained of diarrhoea, with pain in the chest. On examining the chest, dulness was found at the lower portion of the right lung. The liver was considerably enlarged. Some time afterwards he died, and at the autopsy the right pleural cavity was found to contain a large amount of pus, with a few threads of gangrenous tissue. The lung was bound down to the diaphragm by adhesions. The liver contained a large abscess, and on removing it the pus flowed into the pleura. The explanation of the case was, that originally there was an hepatic abscess which opened into the pleura, and at the same time into the bronchi by means of the adherent lung.

The mucous membrane of the large intestines from the anus to the ileum was the seat of ulcers with gangrenous bases. These ulcers were from half an inch to an inch in extent, and separated from one another by portions of healthy mucous membrane.

PROPHYLACTIC IN CHOLERA INFANTUM (*New York Medical Journal*, December, 1875).—The numerous cases of gastro-intestinal catarrh occurring in small children during summer preponderate among such as are fed with the bottle. The various kinds of treatment adopted by physicians have not proved very successful: hence a prophylactic against this disease is of great value.

As the affection originates in the nourishment of the infant, Jacusiel (*Berlin. Klin. Wochenschrift*, 1875) has been led to add two tablespoonfuls of a one-third per cent. solution of salicylic acid in water to the daily allowance of milk, with the effect of rendering the germ of the disease powerless. The children fed in this manner have not had gastro-intestinal catarrh, or suffered any inconvenience from this rather free use of salicylic acid. The remedy is harmless and also inexpensive.

FUNCTION OF THE LEVATOR ANI MUSCLE (*The Chicago Medical Examiner*, December, 1875).—This muscle is believed by some to raise and dilate the anus, by others to be a second sphincter. Its relation to the pelvic fascia must be studied in order to arrive at a correct opinion about its function. Its fibres spring from the tendinous arch of the pelvic fascia, at the horizontal ramus of the pubis, the ischial spine, and the anterior end of the coccyx. The fibres, while spreading over the movable portion of the pelvic fascia, surround the lower part of the rectum in such a way that this is constricted by the contracting muscle. It has been proved, by experiments on animals recently killed, that the excitation of this muscle produces a perfect obstruction to the passage of water through the rectum.

It is the levator muscle, and not the superior sphincter ani, which effects a retention of faeces in case of destruction of the sphincter ani.

CONVULSIONS DUE TO UTERINE POLYPUS (*Medical News and Library*, September, 1875).—A mother of four children had convulsions for two years, the attacks being more frequent at the menstrual period, though rarely absent for a week. One year before their occurrence, there had been uterine hemorrhage. A polypus as large as a hen's egg was removed from its attachment to the anterior wall of the uterus and the external os, by the aid of a wire écraseur. All convulsive symptoms were at once and permanently relieved.

REDUCTION OF A STRANGULATED FEMORAL HERNIA BY LASSEN'S METHOD (*The Medical Record*, November 20, 1875).—A woman of 53 had suffered for three years from a femoral hernia of the left side, and had never worn a truss. Symptoms of strangulation had existed for thirty-two hours when she was seen. After all the ordinary modes of reducing it had been tried in vain, the method of taxis which Lassen recommends was resorted to, based on his theory of the mechanism of strangulation,—viz., that the incarceration is due to obstruction of the efferent end of the intestinal loop, which on its part is caused by distention of the afferent end compressing it at the neck of the sac. The lateral movements of the whole hernial tumor, which Lassen advises with the view of emptying the efferent end of the intestine, were in this case crowned with success, the bulk of the tumor gradually shrinking and the whole slipping back rather suddenly at the last, with entire relief of the symptoms.

CASE OF HEMORRHAGE IN THE PONS (*Virginia Medical Monthly*, November, 1875).—A man 68 years of age was found senseless, lying on the floor, and carried to the hospital. On the following morning he still remained in a state of almost complete coma, from which he could be aroused only by powerful excitants. His face was not distorted; he stammered several unconnected words; the tongue, which he could put out, showed no deviation; there was equally little paralysis of the uvula. The extremities of the right side on being elevated fell relaxed; those of the left side showed only some weakness. The left eye could not be closed. The same evening the left extremities also were paralyzed; and the patient died that night.

At the autopsy, the bridge showed by a sagittal division a hole almost in the centrum, and divided into two parts,—of which the one in the left half appeared of older date, but to correspond with the first attack; the other was filled with a coagulum about the size of a pea, that could easily be isolated, and that hung to a vessel,—to the arteria mediana pontis. No small aneurism could be found on the vessel.

MISCELLANY.

It is stated that a panic recently occurred in Calcutta because a very widely-used fish was announced to be affected with parasites. The authorities prohibited the sale of this particular piscatorial species; but after a time it was found that the so-called worms were portions of spinal nerves.

DEATH FROM TEN GRAINS OF CHLORAL.(?)
—A lady, said to have been subject to epileptic fits, had a small dose of chloral (ten grains) administered to her, and was found the next morning lying on her face, and dead. Death after an epileptic fit from accidental suffocation is not uncommon, and it is very possible that it was in this way that it happened. But if a fit occurred during the night it does not appear to have been sufficient to rouse the husband of the lady, who was sleeping by her.—*Lancet*.

We desire to call especial attention to the extremely elaborate Atlas of Skin-Diseases, now in course of preparation by Messrs. J. B. Lippincott & Co., under the supervision of Dr. Duhring. We have seen some of the original drawings by Mr. Faber, and they excel anything of the sort that has come to our notice. The past work of the chromo-lithographers selected is a guarantee of a faithful reproduction.

THE revenue receipts from the opium trade in India for 1874 were £8,324,879.

It is rather suggestive, not to say amusing, that while three or four homœopathic practitioners were before the city committee last Wednesday week with their roll of petitioners' names to urge that a ward in the City Hospital be devoted to homœopathic treatment, and lamenting the absence of the petitioners themselves, their *first* and *chief* petitioner was at that very time convalescing under the care of a regular physician, having dismissed his homœopathic attendant some days previously.—*Boston Med. and Surg. Journal*.

SIR ROBERT CHRISTISON, with a view of testing the alleged properties of the coca-leaf, chewed it by way of a stimulant during two ascents of Ben Voirlich. On reaching the top he felt greatly fatigued, but the coca quickly relieved him, and he made the descent with ease and enjoyment. He declares that its use has enabled him to walk sixteen miles without feeling any of the fatigue he would otherwise have experienced.

OBITUARY.

At a special meeting of the students of Jefferson Medical College, held December 11, 1875, the following preamble and resolutions were unanimously adopted:

Whereas, An all-wise God in his providence has seen fit to remove from our midst, by a very sudden death, our worthy and esteemed friend Charles C. Park, of Clearfield, Pa., we, his fellow-students of Jefferson Medical College, deem it right and proper to give expression to our sorrow at the sad intelli-

gence, and to convey to his afflicted family some assurance of our sympathy: therefore be it

Resolved, That, while we bow in humble submission to the will of the Supreme Physician, we recognize in the death of our fellow-student a serious loss, one that will long be remembered and deeply felt among us, as his disposition and conversation were such as to endear him to all who knew him. We truly lament his removal from our midst, but hope that our loss may be his infinite gain.

Resolved, That, in this time of their deep affliction at the loss of their only child, we sincerely tender our warmest sympathies to his bereaved father and mother, and hope this assurance of our love and respect for our deceased brother may be received as evidence that others partake with them in their anguish.

Resolved, That a copy of these resolutions be printed in the Clearfield papers, the *Public Ledger* and *Medical Times* of Philadelphia, and that they become a part of the minutes of the Class of 75-76.

DAN. E. HUGHES,	} Committee.
R. P. HEILMAN,	
W. S. MUDGE,	
A. C. BARTON,	
F. H. BOUCHER,	

At a conversational meeting of the Philadelphia County Medical Society, held November 24, 1875, the following preamble and resolutions, presented by Dr. Washington L. Atlee, were unanimously adopted:

Whereas, The recent announcement of the death of Edward Wallace, M.D., has been received by this Society with a deep sense of sorrow and regret, and

Whereas, It is fitting to bear testimony to his personal and professional character: therefore

Resolved, That in the decease of our late fellow-member the Philadelphia County Medical Society has lost the services of an efficient officer and an active and high-toned associate, the medical profession a gentleman distinguished for ability and urbanity, and society the influence of a valuable and esteemed citizen.

Resolved, That the chair of Second Vice-President, made vacant by his death, shall not be filled during the remainder of the term.

Resolved, That we sincerely condole with the family in the afflicting bereavement which deprives them of one whose upright and unobtrusive life secured him universal esteem and respect.

Resolved, That these proceedings be entered on the minutes of the Society, and a copy of them be furnished to the family of the late Dr. Wallace.

Signed by the President and Secretary.

H. LEAMAN,
Recording Secretary.

Died, November 18, 1875, at San Antonio, Texas, Dr. C. W. Knight, U.S.A., in the 32d year of his age.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM DECEMBER 5, 1875, TO DECEMBER 18, 1875, INCLUSIVE.

STERNEBERG, GEORGE M., SURGEON.—Promoted Surgeon, to date from December 1, 1875, vice Peters, retired.

WILLIAMS, J. W., ASSISTANT-SURGEON.—Leave of absence extended one month. S. O. 70, Headquarters of the Army, December 13, 1875.

WHITE, R. H., ASSISTANT-SURGEON.—Assigned to duty as Attending Surgeon at these Headquarters, San Antonio. S. O. 225, Department of Texas, November 29, 1875.

YEOMANS, A. A., ASSISTANT-SURGEON.—Assigned to duty at Fort Richardson, Texas. S. O. 231, Department of Texas, December 8, 1875.

ADAIR, G. W., ASSISTANT-SURGEON.—Assigned to duty at Fort McKavett, Texas. S. O. 233, Department of Texas, December 10, 1875.

BEDAL, S. S., ASSISTANT-SURGEON.—Assigned to duty at Fort Concho, Texas. S. O. 233, c. s., Department of Texas.

PETERS, DE WITT C., SURGEON.—Retired from active service; to date from December 1, 1875. S. O. 247, A. G. O., December 6, 1875.

WILSON, A. D., ASSISTANT-SURGEON.—Died at Camp McDowell, Arizona Territory, on November 30, 1875.